Product number: FL-2100-E / FL-2100-C / FL-2100-D

SAFETY DATA SHEET

1. Identification

Product identifier HEAVY DUTY FLOOR STRIPPER

Other means of identification

Product number FL-2100-E / FL-2100-C / FL-2100-D

Recommended use Floor polish remover

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name PEN Products

Address Indiana Department of Correction

2010 East New York Street Indianapolis, IN 46201

United States

Telephone 317 955-6800

800 736-2550

Emergency phone number CHEMTREC 1-800-424-9300

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Acute toxicity, oral Not classified

Acute toxicity, dermal

Skin corrosion/irritation

Serious eye damage/eye irritation

Sensitization, skin

Not classified
Category 1B

Category 1

Category 1

Specific target organ toxicity, single exposure Category 3 respiratory tract irritation

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement Causes serious eye damage. Causes severe skin burns and eye damage. May cause an allergic

skin reaction. May cause respiratory irritation.

Prevention Wear safety glasses with side shields (or goggles). Wear protective gloves. Do not breathe mist

or vapor. Use only in well-ventilated areas. Wash hands thoroughly after handling.

Response IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing. Immediately call a poison center/doctor. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. IF

SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center/doctor. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a

poison center/doctor if you feel unwell.

Storage Store locked up. Store in a well-ventilated place. Keep container tightly closed. Store away from

incompatible materials. Keep out of the reach of children.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Product number: FL-2100-E / FL-2100-C / FL-2100-D

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information

None known.

Composition/information on ingredients

Mixtures

Chemical name	CAS number	% by weight
2-Butoxyethanol	111-76-2	25 - <30
Ethanolamine	141-43-5	5 - <10
d-Limonene (Terpene Hydrocarbon)	5989-27-5	1 - <5
Potassium hydroxide	1310-58-3	0.1 - <1

4. First-aid measures

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if Eye contact

present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Remove contaminated clothing immediately and wash skin with soap and water. Chemical burns Skin contact

must be treated by a physician. If skin irritation or rash occurs: Get medical advice/attention. Wash

contaminated clothing before reuse.

Ingestion Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If

vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON Inhalation

CENTER or doctor/physician if you feel unwell.

Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water Notes to physician

immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance, if not at hospital. Continue flushing during transport to hospital. Keep victim under

observation. Symptoms may be delayed.

Most important

symptoms/effects, acute and

delayed

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause an allergic skin reaction. Dermatitis. Rash.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to

protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

media

Alcohol resistant foam. Water fog. Dry chemical powder. Carbon dioxide (CO2).

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from

the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Do not breathe mist or vapor. Ensure adequate ventilation. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection, see section 8 of the SDS. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up Large Spills: Stop the flow of material, if this is without risk. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Material name: HEAVY DUTY FLOOR STRIPPER 4921 Version #: 01 Issue date: 01-09-2015

Product number: FL-2100-E / FL-2100-C / FL-2100-D

7. Handling and storage

Precautions for safe handling Wear appropriate personal protective equipment. Do not get this material in contact with eyes. Do

not get this material in contact with skin. Do not get this material on clothing. Do not breathe mist or vapor. Do not use in areas without adequate ventilation. Avoid prolonged exposure. Do not mix

with other chemicals. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Keep out of the reach of children.

8. Exposure controls/personal protection

Occupational exposure limits

US. AC	GIH.	Threshold	Limit	Values
--------	------	-----------	-------	--------

Components	Туре	Value
2-Butoxyethanol (CAS 111-76-2)	TWA	20 ppm
Ethanolamine (CAS 141-43-5)	STEL	6 ppm
	TWA	3 ppm
Potassium hydroxide (CAS 1310-58-3)	Ceiling	2 mg/m3

Control parameters

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	
2-Butoxyethanol (CAS 111-76-2)	PEL	240 mg/m3	
		50 ppm	
Ethanolamine (CAS 141-43-5)	PEL	6 mg/m3	
		3 ppm	

Biological limit values

ACGIH Biological Exposure 1	ndices
-----------------------------	--------

Components	Value	Determinant	Specimen	Sampling Time
2-Butoxyethanol (CAS 111-76-2)	200 mg/g	Butoxyacetic acid (BAA), with hydrolysis	Creatinine in urine	*

^{* -} For sampling details, please see the source document.

Appropriate engineering controls

Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits. Eye

wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear protective gloves.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective

equipment to remove contaminants.

9. Physical and chemical properties

Appearance opaque
Form Liquid.
Color Yellow green

Odor mild citrus and solvent

Odor threshold Not available.

Product number: FL-2100-E / FL-2100-C / FL-2100-D

pH 12.8

Melting point/freezing point 30 °F (-1.11 °C) Boiling point 212 °F (100 °C)

Flash point > 200.0 °F (> 93.3 °C) Pensky-Martens Closed Cup

Evaporation rate 1

Flammability (solid, gas)

Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Flammability limit - upper

Not available.

(%)

Vapor pressure 0.6 mm Hg @68°F (2-Butoxyethanol)

Vapor density 4 (2-Butoxyethanol)

Solubility(ies)

Solubility (water) 100 %

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Specific gravity 0.99 VOC (Weight %) 36 %

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous Hazardous polymerization does not occur.

reactions

Conditions to avoid Avoid temperatures exceeding the flash point. Contact with incompatible materials. Do not mix with

other chemicals.

Incompatible materials Strong acids. Acids. Strong oxidizing agents. Oxidizing agents.

Hazardous decomposition

products

No hazardous decomposition products are known.

Toxicological information

Toxicological data

Product Test Results

HEAVY DUTY FLOOR STRIPPER (Mixture)

Acute Dermal LD50 Rabbit: > 5000 mg/kg

Acute Oral LD50 Rat: > 5000 mg/kg

Information on likely routes of exposure

Eye contact Causes serious eye damage.

Skin contact Causes severe skin burns. May cause an allergic skin reaction.

Ingestion Causes digestive tract burns.

Inhalation Prolonged inhalation may be harmful. May cause irritation to the respiratory system.

Symptoms related to the physical, chemical and toxicological characteristics

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including

blindness could result. May cause an allergic skin reaction. Dermatitis. Rash.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

Product number: FL-2100-E / FL-2100-C / FL-2100-D

IARC Monographs. Overall Evaluation of Carcinogenicity

2-Butoxyethanol (CAS 111-76-2) 3 Not classifiable as to carcinogenicity to humans.

d-Limonene (Terpene Hydrocarbon) (CAS 5989-27-5) 3 Not classifiable as to carcinogenicity to humans.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Chronic effects Prolonged inhalation may be harmful. May be harmful if absorbed through skin.

2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and

prolonged. These effects have not been observed in humans.

Prolonged or repeated exposure may cause liver and kidney damage. These effects have not

been observed in humans.

Toxicological information Occupational exposure to the substance or mixture may cause adverse effects.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

No data is available on the degradability of this product. Persistence and degradability

No data available. Bioaccumulative potential

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not

contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

The waste code should be assigned in discussion between the user, the producer and the waste Hazardous waste code

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Empty containers should be taken to an approved waste handling site for recycling or disposal. Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

Transport information

DOT

UN number UN1760

Corrosive liquids, n.o.s. (Ethanolamine, Potassium hydroxide RQ = 370370 LBS) UN proper shipping name

Transport hazard class(es)

8 Class Subsidiary risk Label(s) 8 Packing group Ш

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Special provisions B2, IB2, T11, TP2, TP27

Packaging exceptions 154 Packaging non bulk 202 Packaging bulk 242

Ethanolamine

POTASSIUM HYDROXIDE

IATA

UN number UN1760

UN proper shipping name Corrosive liquid, n.o.s. (Ethanolamine, Potassium hydroxide)

Product number: FL-2100-E / FL-2100-C / FL-2100-D

Transport hazard class(es)

Class 8 Subsidiary risk Label(s) Packing 8 group Environmental Ш hazards ERG Code No. 8L

Special precautions for user

Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo

aircraft

Cargo aircraft only

Allowed.

Allowed.

30 L АЗ

IMDG

UN1760 UN number

CORROSIVE LIQUID, N.O.S. (Ethanolamine, Potassium hydroxide) UN proper shipping name

Transport hazard class(es)

Class 8 Subsidiary risk Label(s) Packing 8 group Environmental Ш

hazards

Marine pollutant No.

EmS Not available.

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

DOT



IATA; IMDG



15. Regulatory information

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication US federal regulations

Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

Product number: FL-2100-E / FL-2100-C / FL-2100-D

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed

CERCLA (Superfund) reportable quantity

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely

hazardous substance

SARA 311/312 Hazardous No

chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

Inventory name

(SDWA)

US state regulations

US. Massachusetts RTK - Substance List

2-Butoxyethanol (CAS 111-76-2) Ethanolamine (CAS 141-43-5)

US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

US. Pennsylvania RTK - Hazardous Substances

2-Butoxyethanol (CAS 111-76-2) Ethanolamine (CAS 141-43-5)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region

Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No

On inventory (yes/no)*

Product number: FL-2100-E / FL-2100-C / FL-2100-D

Country(s) or region Inventory name On inventory (yes/no)*

Philippines Philippine Inventory of Chemicals and Chemical Substances

No

(PICCS)

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

HMIS Hazard Ratings
Health: 2
Flammability: 1
Reactivity: 0

Issue date 01-09-2015

Version # 01

Disclaimer The information in the sheet was written based on the best knowledge and experience currently

available. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and

release.

Material name: HEAVY DUTY FLOOR STRIPPER 4921 Version #: 01 Issue date: 01-09-2015